Organic Reaction Review

Write structural formulas for all organic compounds. State the type of reaction. Complete and balance the reaction. Name the products.

1. propene + hydrogen →
2. cyclohexane + chlorine →
3. benzene + iodine →
4. ethanol + butanoic acid →
5. 2-pentene + bromine →
6. ethene + water →
7. chloroethane + sodium hydroxide →
8. propene + bromine →
9. chlorobenzene + chlorine →
10. ethanol + hexanoic acid →
11. 3-pentanol + oxygen →
12. propyne + (2 mol) iodine →
13. cyclohexene + water →
14. ethoxyhexane + oxygen →
15. 2-pentanol $\xrightarrow{acid}$
16. diethyl ether + oxygen →
17. 3-methyl-1-cyclohexanol $\xrightarrow{acid}$
18. 4-methyl-2-hexanol $\xrightarrow{acid}$
19. naphthalene + iodine →
20. propane + (2 mol) iodine →
21. 2-hexene + water →
22. ethyl 3-methylbutanoate + oxygen →
23. benzene + oxygen →
24. cyclohexene + fluorine →
25. 2-bromo-1-hexanol + benzoic acid →
26. 3-pentyne + (2 mol) water →
27. 2,4-dimethyl-2-hexene + hydrogen bromide →
28. cyclopentane + fluorine →
29. 3-methyl-2-butanol $\xrightarrow{acid}$
30. 3-chloroheptane + sodium hydroxide →
31. 2-bromo-2,3-dimethylpentane + potassium hydroxide →
32. chlorocyclohexane + sodium hydroxide →
33. 2,3,4-trimethylpentanoic acid + oxygen →
34. 2,3,4-trimethylpentanoic acid + methanol →
35. 3-hexyne + chlorine →
36. 3-hexyne + (2 mol) chlorine →
37. 3-chlorohexanoic acid + 1-propanol →
38. 5,5-dimethyl-2-hexene + hydrogen bromide →
39. 2-bromonaphthalene + chlorine →
40. 1-chlorocyclohexane + potassium hydroxide →